NBSIR 73-278 (4 Volumes)

Model Documents for the Evaluation, Approval, and Inspection of Manufactured Buildings

VOLUME IV – COMPLIANCE ASSURANCE AND
LOCAL ENFORCEMENT AGENCY DOCUMENTS

CES Project
Office of Building Standards and Codes Services
Center for Building Technology, IAT
National Bureau of Standards
Washington, D. C. 20234

September 1973

Preliminary Report

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS

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MODEL DOCUMENTS FOR THE EVALUATION, APPROVAL, AND INSPECTION OF MANUFACTURED BUILDINGS

VOLUME IV – COMPLIANCE ASSURANCE AND LOCAL ENFORCEMENT AGENCY DOCUMENTS

R. D. Dikkers, H. R. Trechsel, P. W. Cooke, H. K. Tejuja, L. P. Zelenka

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Preliminary Report

This is a preliminary report issued with the express intent to solicit comments and suggestions. Accordingly, results and conclusions contained herein are not necessarily those that will be included in the final report.

U. S. DEPARTMENT OF COMMERCE, Frederick B. Dent, Secretary
NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, Director

PREFACE

In response to requests from the Executive Office of the President and the National Conference of States on Building Codes and Standards (NCSBCS), the National Bureau of Standards has undertaken specific research programs to remove or reduce barriers created by the building regulatory process, so as to improve productivity and innovation in building construction. One of these programs is to establish a Coordinated Evaluation System (CES) by developing, in conjunction with the state governments, model informational documentation for use in the building regulatory process.

This four-volume report outlines the results of an initial study of documentation needs, sample forms and checklists pertaining to manufactured buildings and components. It is a preliminary report issued with the expressed intent to solicit comments and suggestions so that more comprehensive and more generally applicable model documentation can be developed.

A first draft of this report was reviewed during a 2 1/2 day meeting in April, 1973, by a group of consultants composed of representatives of state and local building officials, design professionals, third party evaluation and inspection agencies, and industrialized building manufacturers. The review meeting was organized and chaired by Mr. John Dunlap, Consulting Engineer of Sacramento, California. The other consultants were:

Joseph Bartell, City of St. Petersburg
Jack Bono, Underwriters Laboratories, Inc.
Kern E. Church, State of North Carolina
Jasper Hawkins, Hawkins and Lindsey, Architects
James M. Hicks, State of California
Glendon R. Mayo, Consulting Engineer
J. Dillard Powell, Continental Homes
Ed Starostovic, Product Fabrication Service
Joseph Stein, City of New York
Steve Wilson, National Homes Corporation

The comments of the consultants were most helpful in developing the model documents contained in this report, and their valuable assistance is greatly appreciated and herewith acknowledged.

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VOLUME IV - COMPLIANCE ASSURANCE AND LOCAL ENFORCEMENT AGENCY DOCUMENTS

MODEL DOCUMENTS FOR THE EVALUATION, APPROVAL, AND INSPECTION OF MANUFACTURED BUILDINGS

R. D. Dikkers, H. R. Trechsel, P. W. Cooke,
H. K. Tejuja, L. P. Zelenka

To assist the states in developing their building regulatory activities and functions, the Coordinated Evaluation System (CES) Project has defined and developed model informational documentation pertaining to the functional areas of data submission, evaluation, approval, compliance assurance, installation data, and owner information.

This is a preliminary report which gives the results of the investigation to date, and presents discussions of informational needs and sample model documents pertaining to manufactured buildings and building components. The model documentation is based on the Model Rules and Regulations for manufactured buildings developed by a Department of Commerce sponsored working task group, and the results of a comprehensive state-of-the-art study of most of the existing state building regulatory programs. The documentation presented in this report covers all functional areas except owner information which is not usually subject to regulation and will be covered by a separate report. Emphasis was placed on developing documentation applicable primarily to one and two family detached dwellings.

Based on the comments received on this preliminary report, the documentation presented herein will be revised and a final report issued.

Key words: Building codes; certification; compliance assurance; evaluation; industrialized building; inspection; model documents; NCSBCS; standards; state regulation.

MANUFACTURER'S DATA PLATE

Part IV, Section 3(A) requires that the manufacturer place certain information directly or by reference on one or more data plates.

The data plates for manufactured buildings are to be permanently mounted on or in the vicinity of the electrical distribution panel or in some other easily accessible location approved by the Administrative Agency. Most data plates currently used are metal with the information either printed or embossed. For manufactured building components the Administrative Agency is given the authority to approve alternate means of supplying the required information. In particular, where the size and/or shape of a component is such that a data plate can not be attached permanently, the information can be given on a tag attached to the component or in a manual crated with the component. Information which is needed by the occupant (user) also should be contained in a manual which is presented to him upon transfer of possession.

The purpose of the data plate is to provide permanently the information needed to identify and properly operate the unit. As stated in the Rules and Regulations, the data plate must contain the following information:

1. Manufacturer's name and address:
2. Serial number of unit;
3. Label serial number;
4. Name and date of applicable nationally recognized codes complied with;
5. Model designation and name of manufacturer of major in-plant installed appliances.

If required by the adopted code, standard, specification or requirement, the Rules and Regulations require that the following additional information also be given on the data plate:

6. Identification of permissible type of gas for appliances and directions for water and drain connection;
7. Snow, wind, seismic, and other live load criteria;
8. Electrical ratings - instructions and warnings on voltage;
9. Special conditions or limitations on use of the unit, including unsuitability for areas in which specified environmental conditions prevail;
10. Methods of assembly or joining multiple units;
11. Type of construction, including fire rating, occupancy class, interior finish flame spread class, and toxicity class;
12. Building height and story limitation;
13. Floor area;
14. Minimum side yard requirements for fire rating.

The information that should be given on the data plate for a specific unit depends on the unit's characteristics and its intended use. Accordingly, some of the above

items may not apply to a given unit, and other information may be needed. In selecting the contents of the data plate, it should be borne in mind that all those items should be recorded on the permanent plate which need to be known after initial installation of the unit on the site, and possibly a long time thereafter. Accordingly, if the initial installation is of a permanence similar to that of conventional construction, instructions for this installation need not be given on the data plate (although it must be furnished by the installer to the erector, builder, or owner in some other form). However, if the unit is intended and designed for later or periodic reinstallation on new sites (such as for example, relocatable schools), installation instructions should also be contained on the data plate. Similarly, the need for including items referring to building and story height limitations, occupancy and zoning, climatic conditions, etc., also depend on the likelihood of either later relocation and/or changes in occupancy and use.

An example of a manufacturer's data plate is shown on page 3 of this document. In the example shown, all items that the Model Rules and Regulations give as mandatory contents are shown. Additional contents which are dependent on codes and other state requirements are included based on the state-of-art study of data plate requirements currently established by the various states.

MANUFACTURER'S DATA PLATE

Manufactured by:

Date of Manufacture: _____	Serial No. _____	Label No. _____

Unit complies with Codes and Standards:

Name	Edition Year
_____	_____
_____	_____
_____	_____
_____	_____

Electrical System:

Panel Board _____ Amps. cycle _____ wire _____ phase _____

Number circuits _____ voltage capacity _____ High temperature field service conductors _____ °C

Equipment:

	Capacities	Fuel
Furnace	_____	_____
Water Heater	_____	_____
Air Conditioner	_____	_____

Potable water system tested at ____ psig.

DWV plumbing system tested at ____ psig.

Design Criteria:

Wind load _____ lbs/sq. ft. Floor load _____ lbs/sq. ft.

Roof load _____ lbs/sq. ft.

Roof pitch (/) at ____ lbs/sq. ft. total load.

Seismic zone _____ construction.

Design temperatures: Summer ____ °F; Winter ____ °F

IN-PLANT INSPECTION CHECKLISTS

This document is a production station oriented series of checklists portraying the essential characteristics of inspection by the Inspection Agency during audit inspections of the manufacturer. The checklists presented in this report are for a hypothetical wood frame modular unit produced in a main assembly production sequence. It is not representative of any one manufacturer but is presented in this report to illustrate the approach and degree of detail that should be checked on the manufacturer's production line.

The essential characteristics of inspection have typical suggested callouts for the materials of construction and then the individual fabrication steps for each suggested production station in the sequence. For each characteristic of inspection, a reference (source of design intent) is indicated by an identifying number where the actual design data for each characteristic can be found. Provision is made for entering the actual design conditions on the checklists under "Actual Design Requirement" for each characteristic.

The checklists also contain the suggested methods for determining compliance for each characteristic, identified by letters.

Individual In-Plant Inspection Checklists with the "Actual Design Requirement" entries completed should be submitted as part of the compliance assurance manual submittal for each production model for which approval is sought.

Page 2 of this document contains an index of the separate station checklists. Pages 68 and 69 of this document give the keys for the identification of the design intent reference numbers and compliance determination reference letters.

Index to Station Checklists

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: FLOOR FRAMING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Structural framing members - joists, beams, stringers, blocking, bridging, etc.			
(a) Species	1		A, D
(b) Grade	1		A, D
(c) Size(s)	1		E_1
(d) Moisture Content	1, 2		D, E_2
(e) Preservative Treatment	1, 2		D, F
(f) Condition/Tolerances (e.g., warp, bow, splits, twist, etc.)	2, 3		D, E_1
2. OPERATIONS:			
(a) Measuring and Cutting			
(1) Span (joists)	1		E_1, G
(b) Drilling and Notching			
(1) Holes	1, 2, 4		D, E_1
(2) Notches	1, 2, 4		D, E_1
(c) Layout/Spacing			
(1) Location and Orientation (joist setting with crown up)	1, 2		D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: FLOOR FRAMING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(2) Laps and Splices	1, 2		D, E_1
(3) End Bearing	1, 2		D, F
(4) Lateral Support (e.g., blocking, bridging)	1, 2		D, F
(d) Framing for Floor Openings (e.g., stairwells)	1		
(1) Location (per drawing)	1		D, E_1
(2) Framing (per drawing)	1		D, F
3. FASTENERS: Nails, bolts/screws, joist hangers			
(a) Size	1, 2		B, D, E_1
(b) Type/Grade	1, 2, 6		B, D
(c) Condition	2		D, F, G
4. CONNECTIONS:			
(a) Number (of fasteners)	1		D
(b) Location and Spacing	1, 2		D, E_1
(c) Method (e.g., toenail, end-nail)	1, 2		D, F
(d) Bearing of Members	2		D, F
(e) Washers (w.bolts/screws)	1, 2		D, F
(f) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: FLOOR INSULATION STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Moisture barrier, thermal insulation			
(a) Size (e.g., thickness, weight)	1		B, D
(b) Type/Grade	1		B, D
(c) Condition (e.g., dry, undamaged)	2		D, F, G
2. INSTALLATION:			
(a) Moisture Barrier			
(1) Placement (e.g., continuity)	1, 2		D
(2) Attachment	1, 2		D
(b) Thermal Insulation			
(1) Placement	1, 2		D, E_1
(2) Attachment (method of fastening, location and spacing)	1, 2		D, E_1
(c) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: FLOOR SHEATHING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Plywood, proprietary			
sheathing types			
(a) Size (e.g., thickness)	1		B, D, E_1
(b) Type/Grade	1		A, B, D
(c) Condition/Tolerances	2, 5		D, F_3, G
2. FASTENERS:			
(a) Nails, Staples			
(1) Size	1, 2		B, D, E_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D
(3) Mixing Schedule	2		B, D
(4) Coupon Tests	2		D, H
3. INSTALLATION:			
(a) Measuring and Cutting	1		D, E_1
(b) Layout			

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: FLOOR SHEATHING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(1) Dimensions	1		D, E_1
(2) Location and Orientation	1		D
(3) Laps and Splices	1		D
(c) Nails, Staples			
(1) Number	1		D
(2) Location and Spacing	1		D, E_1
(3) Workmanship	2		D, F, G
(d) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature-or special handling conditions	1, 2		D
(4) Curing (drying time before next operation)	1, 2		D
(5) Workmanship	2		D, F, G
(e) Methods			
(1) Face grain orientation with respect to joists	2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: FLOOR SHEATHING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(2) Joints centered over joists, rafters	2		D
(3) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: WALL FRAMING AND SETTING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Structural framing members--studs, plates, lintels, etc.			
(a) Species	1		A, D
(b) Grade	1		A, D
(c) Size(s)	1		E_1
(d) Moisture Content	1, 2		D, E_2
(e) Condition/Tolerances (e.g., warp, bow, splits, twist,etc)	2, 3		D, E_1
2. OPERATIONS:			
(a) Measuring and Cutting	1		E_1, G
(b) Drilling and Notching	1, 2		D, E_1
(c) Layout/Spacing	1, 2		D, E_1
(d) Framing for Wall Openings	1		
(1) Location (per drawing)	1		D, E_1
(2) Framing (per drawing)	1		D, E

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: WALL FRAMING AND SETTING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
3. FASTENERS: Nails, bolts/screws, staples			
(a) Size	1, 2		B, D, F_1
(b) Type/Grade	1, 2, 6		B, D
(c) Condition	2		D, F, G
4. CONNECTIONS:			
(a) Number (of fasteners)	1		D
(b) Location and Spacing	1, 2		D, F_1
(c) Method (e.g., toenail, end-nail)	1, 2		D, F
(d) Bearing of Members	2		D, F
(e) Plumb and Square	2		D, F
(f) Workmanship	2		D, F, G
5. ERECTION/SETTING OF WALLS:			
(a) Connections/Fasteners			
(1) Number (of fasteners)	1		D
(2) Location and Spacing	1, 2		D, F_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF

STATION NAME: WALL FRAMING AND SETTING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Method	1, 2		D, F
(b) Bearing of Members	2		D, F
(c) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: WALL INSULATION STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Moisture barrier, thermal insulation			
(a) Size (e.g., thickness, weight)	1		B, D
(b) Type/Grade	1		B, D
(c) Condition (e.g., dry, undamaged)	2		D, F, G,
2. INSTALLATION:			
(a) Moisture Barrier			
(1) Placement (e.g., continuity)	1, 2		D
(2) Attachment	1, 2		D
(b) Thermal Insulation			
(1) Placement	1, 2		D, F_1
(2) Attachment (method of fastening, location, and spacing)	1, 2		D, E_1
(3) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: INTERIOR WALL COVERING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Gypsum wallboard			
(a) Size (thickness)	1		B, D, F_1
(b) Type/Grade	1		A, B, D
(c) Condition	2		D, F, G
2. FASTENERS:			
(a) Nails, screws, wallboard clips			
(1) Size	1, 2		B, D, F_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D

N-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: INTERIOR WALL COVERING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Mixing Schedule	2		B, D
(4) Coupon Tests	2		D, H
3. INSTALLATION:			
(a) Nails, screws			
(1) Number (of fasteners)	1		D
(2) Location and Spacing	1		D, E_1
(3) Workmanship	2		D, F, G
(b) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature-or special handling conditions	1, 2		D
(4) Curing (drying time before next operation)	1, 2		D
(5) Workmanship	2		D, F, G
(c) Method			
(1) Joints centered over supports	2		D
(2) Tape and spackle joints	2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: INTERIOR WALL COVERING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Workmanship	2		D. F. G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: CEILING/ROOF FRAMING AND SETTING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Structural framing members-rafters, joists, roof trusses, etc.			
(a) Species	1		A, D
(b) Grade	1		A, D
(c) Size(s)	1		E_1
(d) Moisture Content	1, 2		D, E_2
(e) Condition/Tolerances (e.g., warp, bow, splits, twist, etc.)	2, 3		D, E_1
2. OPERATIONS:			
(a) Measuring and Cutting			
(1) Span (joists)	1		F_1, G
(b) Drilling and Notching	1, 2, 4		D, F_1
(c) Layout/Spacing	1, 2		D, F_1
(d) Laps and Splices	1, 2		D, F_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: CEILING/ROOF FRAMING AND SETTING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(e) End Bearing	1, 2		D, F
(f) Framing for Openings			
(1) Location (per drawing)	1		D, F_1
(2) Framing (per drawing)	1		D, F
3. FASTENERS: Nails, bolts/screws, trussplates, etc.			
(a) Size	1, 2		B, D, F_1
(b) Type/Grade	1, 2, 6		B, D
(c) Condition	2		D, F, G
4. CONNECTIONS:			
(a) Number (of fasteners)	1		D
(b) Location and Spacing	1, 2		D, F_1
(c) Method (e.g., toe-nail, end-nail)	1, 2		D, F

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: CEILING/ROOF FRAMING AND SETTING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(d) Bearing of Members	2		D, F
(e) Plumb and Square	2		D, F
(f) Workmanship	2		D, F, G
5. ERECTION/SETTING OF CEILINGS/ ROOFS:			
(a) Connections/Fasteners			
(1) Number (of fasteners)	1		D
(2) Location and Spacing	1, 2		D, F_1
(3) Method	1, 2		D, F
(b) Bearing of Members	2		D, F
(c) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: INTERIOR CEILING COVERING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Gypsum wallboard			
(a) Size (thickness)	1		B, D, E_1
(b) Type/Grade	1		A, B, D
(c) Condition	2		D, F, G
2. FASTENERS:			
(a) Nails, screws, wallboard clips			
(1) Size	1, 2		B, D, E_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D
(3) Mixing Schedule	2		B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: INTERIOR CEILING COVERING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(4) Coupon Tests	2		D, H
3. INSTALLATION:			
(a) Nails, screws			
(1) Number (of fasteners)	1		D
(2) Location and Spacing	1		D, F1
(3) Workmanship	2		D, F, G
(b) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature-or special handling conditions	1, 2		D
(4) Curing (drying time before next operation)	1, 2		D
(5) Workmanship	2		D, F, G
(c) Method:			
(1) Joints centered over supports	2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: INTERIOR CEILING COVERING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(2) Tape and spackle joints	2		D
(3) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: PLUMBING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Pipe - D.W.V.			
(1) Size(s)	1		D, E_1
(2) Type/Grade	1		A, B, D
(3) Condition	2		D, F, G
(b) Pipe - water supply and distribution			
(1) Size	1		D, E_1
(2) Type/Grade	1		A, B, D
(3) Condition	2		D, F, G
(c) Pipe - gas fuel supply piping			
(1) Size	1		D, E_1
(2) Type/Grade	1		A, B, D
(3) Condition	2		D, F, G
(d) Plumbing fixtures/drains			
(1) Type/Size	1		D, E_1
(2) Label/marking	1		A, B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(e) Valves			
(1) Type/Size	1		D, E_1
(2) Label/marking	1		A, B, D
(f) Appliances and equipment			
(1) Type/Size	1		D, E_1
(2) Label/marking	1		A, B, D
(g) Miscellaneous - air gaps, pipe coatings, compounds, solder, etc.			
(1) Type	1		A, B, D
(2) Label/marking	1		A, B, D
2. INSTALL DRAINAGE SYSTEM:			
(a) Piping			
(1) Location	1		D
(2) Measuring and Cutting	1, 2		D, E_2, G
(3) Reaming	1, 2		D
(4) Grade and pitch	1		D, E_2
(5) Direction	1		D
(6) Hangers and Supports	1, 2		D, F, G
(7) Fittings and Connections	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(8) Direction	1, 2		D
(9) Cleanouts			
- Size	1		D, E_1
- Location	1		D
- Accessibility	1		D, G
(10) Flashing and Weatherproofing	1, 2		D
(11) Workmanship	2		D, F, G
3. INSTALL VENTING SYSTEM:			
(a) Installation -			
(1) Connections and Fittings	1		D
(2) Terminations	1		D, E_1
(3) Location	1		D
(4) Offset	1		D, E_1
(5) Height	1		D, E_1
(6) Reaming	1, 2		D
(7) Flashing and Weatherproofing	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(8) Workmanship	2		D, F, G
4. INSTALL TRAPS AND TRAP ARMS:			
(a) Installation -			
(1) Fixtures serviced	1		D
(2) Location	1		D
(3) Length	1		D, E_1
(4) Vertical Location	1		D, E_1
(5) Horizontal Location	1		D, E_1
(6) Slope and Pitch	1		D, E_1
(7) Workmanship	2		D, F, G
5. INSTALL JOINTS AND CONNECTIONS:			
(a) Installation -			
(1) Location	1		D
(2) Reaming	1, 2		D
(3) Pipe joint compound	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(4) Cleanout plugs			
- Size	1		D
- Lubrication	1		D
(5) Caulking	1, 2		D
(6) Solder and Flux	1, 2		D
(7) Flaring	1, 2		D
(8) Adaptors	1		D
(9) Solvent welding	1, 2		D
(10) Soldering and bronzing	1, 2		D
(11) Compression Fittings	1, 2		D
(12) Slip joints	1		D
(13) Accessibility	1		D, G
(14) Unions			
- Location	1		D
- Accessibility	1		D, G
(15) Waterproofing and counter flashing	1, 2		D, G
(16) Reducers - Increasers			
- Size	1		D
- Adaptors	1		D
(17) Workmanship	1, 2		D, F, G

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
6. INSTALL INDIRECT WASTE PIPING, WET VENTED SYSTEMS AND SPECIAL WASTES:			
(a) Installation -			
(1) Size	1		D, E_1
(2) Location	1		D
(3) Separate discharge vent	1		D
(4) Length	1		D, E_1
(5) Pressure Connections	1		D
(6) Discharge	1		D
(7) Height	1		D, E_1
(8) Workmanship	1, 2		D, F, G
7. INSTALL PLUMBING FIXTURES:			
(a) Installation -			
(1) Location	1		D
(2) Connections	1		D
(3) Access	1		D
(4) Joints and water tightness	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(5) Securing	1, 2		D
(6) Setting	1		D
(7) Support	1		D
(8) Cross connection	1		D
(9) Workmanship	1, 2		D, F, G
8. INSTALL WATER DISTRIBUTION SYSTEM:			
(a) Installation -			
(1) Length	1		D, E_1
(2) Support	1, 2		D
(3) Location	1		D
(4) Connections	1		D
(5) Reaming	1, 2		D
(6) Fittings and Connections	1, 2		D
(7) Valves			
- Pressure	1		D
- Pressure Relief	1		D
(8) Testing	2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(9) Workmanship	2		D
9. INSTALL FUEL GAS PIPING:			
(a) Installation -			
(1) Location	1		D
(2) Length	1		D, E_1
(3) Support	1, 2		D
(4) Connectors	1		D
(5) Testing	2		D
(6) Workmanship	2		D
10. INSTALL WATER HEATER AND VENTS:			
(a) Installation -			
(1) Location	1		D
(2) Enclosures	1		D
(3) Combustion Air	1		D
(4) Controls - location	1		D
(5) Clearances	1, 2		D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: PLUMBING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(6) Protection	1		D
(7) Access	1		D
(8) Venting			
- Location	1		D
- Height	1		D, E_1
- Openings	1		D
- Connectors	1		D
- Support	1, 2		D
- Length, Pitch, Clearances	1		D
- Termination	1		D
- Draft Hood	1		D
(9) Workmanship	1, 2		D, F, G

IN-PLANT INSPECTION CHECKLIST

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MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: ELECTRICAL STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Service Equipment			
(1) Service Enclosure			
- Type	1		A, B, D
- Size	1		A, B, D, E_1
- Capacity & Rating	1		A, B, D
- Switches & Breakers			
-- Main Switch & Breaker rating	1		A, B, D
-- Sub-switches & Breakers - rating	1		A, B, D
- Condition	2		D, F, G
(2) Service Entrance			
- Conduit: overhead & underground			
-- Identification	1		A, B, D
-- Type	1		B, D
-- Size	1		B, D, E_1
- Conductors			

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
-- Type and Insulation	1, 2		A, B, D
-- Size	1		B, D, E_4
- Condition	2		D, F, G
(3) Grounding			
- Grounding conductor	1		A, B, D, E_4
- Ground clamp	1		A, B, D
- Bonding jumper size	1		A, B, D, E_4
(4) Electrical Gutter			
- Type	1		A, B, D
- Size	1		B, D, E_1
- Fittings & Couplings	1, 9		D
- Bonding Jumper Size	1		D, E_4
- Grounding Conductor	1		A, B, D, E_4
(5) Service Disconnects			
- Type	1		A, B
- Size & Rating	1		A, B
- Switch & Breaker	1		A, B
- Fittings, Couplings & Locknuts	1, 9		D, F.
- Grounding Conductor	1		A, B, D, E_4

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(b) Distribution Panel & Load Center			
(1) Panel Board			
- Type	1		A, B
- Size	1		D
- Capacity & Rating	1, 15		A, B, D
- Circuit Breakers & Fuses	1		A, B, D
- Separate grounding conductor			
— Type	1		A, B, D
— Size	1		B, D
- Condition	2		D, F, G
(c) Feeder Circuits			
(1) Type			
- Cable	1		A, B, D
- Individual conductors	1		B, D
(2) Size			
- Cable	1		B, D, E_1
- Individual conductors	1		B, D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Raceways			
- Type	1		A, B, D
- Size	1		B, D, E_1
- Connectors	1, 9		D
(d) Branch Circuits			
(1) Type			
- Cable	1		A, B, D
- Individual conductors	1		B, D
(2) Size			
- Cable	1		B, D, E_1
- Individual conductors	1		B, D, E_4
(3) Raceways			
- Type	1		D
- Size	1		D, E_1
- Connectors	1, 9		D
(e) Fixed Appliances: Ranges, Water Heaters, etc.			
(1) Make & Model			
- Marking & nameplate	1, 10		A, B, D
- Marking of elements	1, 10		B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(f) Outlet Boxes, Switches, Junction Boxes, Fittings, etc.			
(1) Identification			
- Label & marking	1, 9		D
(2) Metallic, Non-metallic			
- Type	1, 9		D
- Size	1		D
- Use - wet location - dry	1		D, G
(g) Lighting Fixtures, Lamp-holders & Lamps			
(1) Type	1		A, B, D
(2) Listed & labeling	1		A, B, D
(3) Fixture studs	1		A, B, D
(4) Outlet boxes	1		A, B, D
(5) Rosettes	1		A, B, D
(6) Condition	2		D, F, G
2. INSTALL ELECTRICAL SERVICE:			
(a) Identification	1, 2		A, B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(b) Mounting cabinet			
(1) Backing	1		D
(2) Height	1		D, E_1
(3) Location	1		D
(c) Service entrance			
(1) Service conduit	1		A, B
- Connection to meter base	1		D
- Supports	1, 2		D
- Reaming & bushing	1, 2		D
- Height & clearance from roof	2, 11		D, E_1
(2) Service entrance conductors: overhead & underground			
- Identification	1, 2		A, B, D
- Length & driploop	1		D, E_1
- Servicehead location	1, 2, 12		D, E_1
- Connections to bus	1, 2		D
- Connection to neutral bus	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(d) Grounding Continuity			
(1) Grounding conductor			
- Connection to bus	1, 2		D
(2) Bonding jumper at service			
- Connection	1, 2		D, F
(e) Gutter at service			
(1) Identification	1, 2		A, B, D
(2) Size and fill	1		B, D, E$_1$
(3) Location	1		D
(4) Mounting	1, 2		D
(5) Service entrance conductors	1, 2		A, B, D
(6) Connection to service entrance conduit			
- Couplings & nipples	1, 13		D
- Bonding & grounding	1, 13		D
- Reaming/bushing	--		D, F
(f) Service Disconnect			
(1) Identification	1, 2		A, B, D
(2) Location	1		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Mounting	1, 2		D
(4) Connections to gutter			
- Coupling & nipples	1, 2		D
- Bonding and grounding	1, 13		D
(5) Meter Base			
- Bonding and grounding	1, 2		D
- Height	1		D, E_1
(g) Workmanship	2		D, F, G
3. INSTALL DISTRIBUTION PANEL AND LOAD CENTER:			
(a) Identification			
(1) Label	1		A, B, D
(b) Mounting			
(1) Location	1		D
(2) Accessability	1, 2		D
(c) Over current protection			
(1) Circuit breakers and fuses	1, 2		A, B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(d) Grounding and bonding			
(1) To main service	1, 2		D
(2) Connections	1, 2		D
(e) Workmanship	2		D, F, G
4. INSTALL FEEDER CIRCUITS:			
(a) Identification	1, 2		D
(b) Drilling, boring-studs/ joists	1, 2, 16		D, E_1, G
(c) Mechanical protection	1, 2, 16		D, G
(d) Mechanical continuity			
(1) Metal raceway	1, 2		D, G
(2) Cable armor	1, 2		D, G
(e) Installation			
(1) Attachment & support	1, 17		D, G
(2) Radius of bend	1, 2		
- Non metallic sheathed cable	1, 18		D, E_1
- Conduit	1, 19		D, E_1
(f) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
5. INSTALL BRANCH CIRCUITS:			
(a) Identification	1		D
(b) Drilling, boring studs joists	1, 2, 16		D, G
(c) Mechanical protection	1, 2, 16		D, G
(d) Mechanical continuity			
(1) Metal raceway	1		D, G
(2) Cable armor	1		D, G
(e) Installation			
(1) Attachment & support			D
- Type and spacing	1, 17		D, E_1
(2) Radius of bend			
- Non-metallic sheathed cable	1, 18		D, E_1
- Conduit	1, 19		D, E_1
(f) Workmanship	2		D, F, G
6. INSTALL FIXED APPLIANCES: RANGES, WATERHEATERS, ETC.			
(a) Marking			

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(1) Nameplate	1, 10		D
(2) Elements	1, 10		D
(b) Supply circuits			
(1) Size of branch circuits	1, 2		D
(2) Identity, branch circuits	1, 2		D
(c) Location			
(1) Spacing	1, 2		D, E_1
(2) Protection from damage	1, 2		D, G
(d) Grounding	1, 2		D
(e) Over current protection			
(1) Circuit breakers	1, 2		D
(2) Controllers and disconnects	1, 2		D
(f) Workmanship	2		D, F, G
7. INSTALL OUTLET, SWITCH AND JUNCTION BOXES AND FITTINGS:			
(a) Identification			
(1) Label and marking	1, 2		A, B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(b) Mounting and Installations			
(1) Supports	1, 20		D
(2) Flush mounting	1, 2, 21		D
(3) Unused openings	1, 2, 22		D
(c) Size and shape			
(1) Depth and dimensions	1		D, E$_1$
(2) Fill and area	1		D, E$_1$
(d) Covers and Canopies	1, 2		D
(e) Conductors			
(1) Entering of boxes	1, 2		F
(2) Securing to boxes, terminals and switches	1, 2		D, F
(3) Bushings	1		D, F
(f) Accessibility	1, 23		D
(g) Grounding, bonding and insulation from supports	1, 2		D, F
(h) Workmanship	2		D, F, G
8. LIGHTING FIXTURES, LAMPHOLDERS, LAMPS, ROSETTES, OUTLET BOXES:			
(a) Identification	1, 2		A, B, D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: ELECTRICAL STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(b) Installation	1, 2		D
(1) Location & Mounting	1, 2		D
(2) Shades, guards	1, 2		D
(3) Clearances	1, 2		D, E_1
(4) Supports	1, 2		D
(5) Conductors - movable part	1, 2		D
(6) Protection-conductors	1, 2		D, G
(7) Connections, splices, tops	1, 2		D
(8) Wet Locations	1, 2		D
(9) Height and mounting	1, 2		D, E_1, G
(10) Grounding and bonding	1, 2		D
9. TESTING OF SYSTEM:			
(1) Continuity Test	2		E_5, F
(2) Dielectric test	2		E_6, F

IN-PLANT INSPECTION CHECKLIST

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MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: MECHANICAL (HVAC) STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Heating Equipment, furnaces, room heaters, etc.			
(1) Type	1		A, B, D
(2) Rating	1		A, B, D
(3) Ducts: metallic, non-metallic	1		D
- Size	1		D, E_1
- Label	1		A, B
- Connectors	1		A, B, D
(4) Vents			
- Size	1		D, E_1
- Type	1		D
- Material	1		D
(5) Condition	2		D, F, G
(b) Ventilation systems			
(1) Ducts, hoods			
- Size	1		D
- Type	1		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
- Material	1		D
- Label	1		A, B, D
(2) Condition	2		D, F, G
(c) Air Conditioning Equipment			
(1) Type	1		A, B, D
(2) Label and nameplate	1		A, B, D
(3) Rating	1		A, B, D
(4) Ducts			
- Size	1		D
- Non-metallic	1		A, B, D
- Connectors	1		A, B, D
(5) Condition	2		D, F, G
(d) Miscellaneous heat producing appliances - ranges, dryers, etc.			
(1) Type	1		A, B, D
(2) Label and nameplate	1		A, B, D
(3) Rating	1		A, B, D
(4) Condition	2		D, F, G

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

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STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
2. INSTALL WARM AIR FURNACES:			
(a) Identification			
(1) Label and nameplate	1		A, B, D
(2) Rating	1		A, B, D
(3) Type of fuel/controls	1		A, B, D
(b) Installation			
(1) Location	1		D, E_1, F
(2) Clearance from combustibles	1, 2		D, E_1, G
(3) Shut-off valve/ location	1, 2		D
(4) Electrical connectors	1, 2		D
(5) Access	1, 2		D
(c) Circulating Air supply			
(1) Source	1		D
(2) Ducts	1		D
(3) Separation	1, 2		D
(4) Air requirements	1, 2		D
(5) Return air	1, 2		D

N-PLANT INSPECTION CHECKLIST (CONTINUED) PAGE OF

TATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(d) Conditioned air supply			
(1) Ducts and connectors	1		D
- Size	1		D, E_1
- Location	1		D
- Registers and grills	1, 2		D
(e) Combustion air			
(1) Air supply	1		D
(2) Space	1		D, E_1
(3) Location of air openings	1, 2		D
(4) Outside supply/interior	1, 2		D, E_1
(5) Under floor supply	1		D, E_1
(6) Ducts/connectors	1, 2		D
(f) Workmanship	2		D, F, G
3. VENTS/CHIMNEYS:			
(a) Identification	1, 2		D
(b) Type - System	1		D
(c) Size/area	1		D, E_1
(d) Location/support	1, 2		D

N-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(e) Length/pitch/clearance	1, 2		D, E
(f) Termination	1, 2		D
(g) Connectors	1, 2		D
(h) Unused openings	1, 2		D
(i) Workmanship	2		D, F, G
4. DUCTS:			
(a) Identification	1, 2		D
(b) Fastening/support	1, 2		D
(c) Location	1		D
(d) Plenum			
(1) Material	1		D
(2) Location	1		D
(3) Access	1, 2		D
(4) Support	1, 2		D
(e) Workmanship	2		D, F, G
5. INSTALL FLOOR FURNACES, ROOM HEATERS, ETC.:			

N-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE OF

TATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(a) Identification/label/listing	1, 2		A, B, D
(b) Type/system	1		A, B
(c) Location/Access	1		D, E_1
(d) Combustion air supply	1, 2		D
(e) Grilles/Registers			
(1) Location	1		D
(f) Support	1, 2		D
(g) Protection from damage	1, 2		D
(h) Controls-manual/auto	1		D, F
(i) Electrical connectors	1, 2		D
(j) Workmanship	2		D, F, G
6. INSTALL VENTILATION SYSTEM:			
(a) Ducts			
(1) Size	1		D, E_1
(2) Capacity	1		D
(3) Dampers	1		D
(4) Location	1		D
(5) Separation	1, 2		D, F
(6) Clearance from combustible	1, 2		D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(7) Tightness	1, 2		D, G
(8) Support	1, 2		D
(9) Cleanouts	1		D
(10) Exhaust outlets			
- Termination	1, 2		D
- Clearance above roofs	1, 2		D, E_1
(b) Hoods			
(1) Material	1		D
(2) Fastening/support	1, 2		D
(3) Size/location	1		D, E_1
(4) Clearance	1, 2		D, E_1
(c) Workmanship	2		D, F, G
7. INSTALL AIR CONDITIONING EQUIPMENT:			
(a) Identification			
(1) Label/nameplate	1		A, B, D
(2) Rating	1		A, B, D
(b) Location	1		D
(c) Support	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(d) Access	1, 2		D, F, G
(e) Circulating Air Supply			
(1) Source	1		D
(2) Duct system	1		D
(3) Separation	1		D
(4) Clearances	1, 2		D
(5) Screens	1		D
(f) Return air limitation	1, 2		D
(g) Workmanship	2		D, F, G
8. INSTALL MISCELLANEOUS HEAT PRODUCING APPLIANCES, RANGES DRYERS:			
(a) Identification			
(1) Label/nameplate	1		A, B, D
(2) Rating	1		A, B, D
(b) Location	1		D
(c) Clearances	1, 2		D, E_1, F
(d) Ducts			
(1) Fastening	1, 2		D
(2) Fire resistant enclosure	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: MECHANICAL (HVAC) STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Connection/fastenings	1, 2		D
(4) Termination/exhaust	1, 2		D, F, G
(e) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: CEILING INSULATION STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Moisture barrier, thermal insulation			
(a) Size (e.g., thickness, weight)	1		B, D
(b) Type/Grade	1		B, D
(c) Condition (e.g., dry, undamaged)	2		D, F, G
2. INSTALLATION:			
(a) Moisture Barrier			
(1) Placement (e.g., continuity)	1, 2		D
(2) Attachment	1, 2		D
(b) Thermal Insulation			
(1) Placement	1, 2		D, E_1
(2) Attachment (method of fastening, location and spacing)	1, 2		D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: CEILING INSULATION STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(3) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: MISCELLANEOUS COMPONENTS (WINDOW, EXIT DOOR, AND STAIRWAY) INSTALLATION STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Doors and Windows			
(1) Size	1		B, D, E_1
(2) Type and Grade	1		A, B, D
(3) Hardware	1		D, G
(4) Weather Stripping and flashing	1		D, G
(5) Condition	2		D, F, G
(b) Stairways			
(1) Size	1, 2, 7		D, E_1
(2) Material Type & Grade	1		A, B, D
(3) Condition	2		D, F, G
2. INSTALLATION:			
(a) Doors and Windows			

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: MISCELLANEOUS COMPONENTS (WINDOW, EXIT DOOR AND STAIRWAY) INSTALLATION STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(1) Location	1		D, E_1
(2) Weather Stripping/ Flashing	1, 2		D
(3) Hardware	1, 2		D, G
(4) Workmanship	2		D, F, G
(b) Stairways			
(1) Layout (e.g., clear width, headroom)	1, 2, 7		D, E_1
(2) Bearing w/r Structural Members	1, 2		D, G
(3) Handrails and Guardrails	1, 2, 8		D, E_1
(4) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: WALL SHEATHING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Plywood, fiberboard, proprietary sheathing types			
(a) Size (e.g., thickness)	1		B, D, E_1
(b) Type/Grade	1		A, B, D
(c) Condition/Tolerances	2, 5		D, E_3, G
2. FASTENERS:			
(a) Nails, Staples			
(1) Size	1, 2		B, D, F_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D
(3) Mixing Schedule	2		B, D
(4) Coupon Tests	2		D, H

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: WALL SHEATHING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
3. INSTALLATION:			
(a) Measuring and Cutting	1		D, F_1
(b) Layout			
(1) Locations	1		D, F
(2) Coverage	1		D, F
(c) Nails, Staples			
(1) Number	1		D
(2) Location and Spacing	1		D, E_1
(3) Workmanship	2		D, F, G
(d) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature-or special handling conditions	1, 2		D
(4) Curing (drying time before next operation)	1, 2		D D
(5) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: EXTERIOR SIDING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Exterior wall siding			
(1) Size	1		B, D, E_1
(2) Type/Grade	1		A, B, D
(3) Condition	2		D, F, G
(b) Weather Flashing			
(1) Material	1		B, D
(2) Type/Size	1		B, D, E_1
(3) Condition	2		D, F, G
(c) Caulking Compounds/Mastics			
(1) Type/Grade	1		B, D
(2) Condition	2		D, F, G
2. FASTENERS:			
(a) Nails, Staples			
(1) Size	1, 2		B, D, E_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: EXTERIOR SIDING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D
(3) Mixing Schedule	2		B, D
(4) Coupon Tests	2		D, H
3. INSTALLATION:			
(a) Flashing	1, 2		D, G
(b) Layout	1		D, F
(c) Weather Tightness	1, 2		D, G
(d) Nails, Staples			
(1) Number	1		D
(2) Location and Spacing	1		D, E_1
(3) Penetration	1, 2		D, F
(4) Workmanship	2		D, F, G
(e) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature - or special handling conditions	1, 2		D

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: EXTERIOR SIDING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(4) Curing (drying time before next operation)	1, 2		D
(5) Workmanship	2		D, F, G
(f) Caulking Application	1, 2		D, G
(g) Corner Treatment	1, 2		D, G

IN-PLANT INSPECTION CHECKLIST

PAGE __ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: ROOF SHEATHING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS: Plywood, proprietary sheathing types			
(a) Size (e.g., thickness)	1		B, D, E_1
(b) Type/Grade	1		A, B, D
(c) Condition/Tolerances	2, 5		D, E_3, G
2. FASTENERS:			
(a) Nails, Staples, Plyclips			
(1) Size	1, 2		B, D, E_1
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G
(b) Adhesives			
(1) Type	1, 2		B, D
(2) Age, Shelf Life	2		B, D
(3) Mixing Schedule	2		B, D
(4) Coupon Tests	2		D, H

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE __ OF __

STATION NAME: ROOF SHEATHING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
3. INSTALLATION:			
(a) Measuring and Cutting	1		D, E_1
(b) Layout			
(1) Blocking/Plyclips	1, 2		D, F
(c) Nails, Staples			
(1) Number	1		D
(2) Location and Spacing	1		D, E_1
(3) Penetration	1, 2		D, F
(4) Workmanship	2		D, F, G
(d) Adhesives			
(1) Application	1, 2		D
(2) Pressure	1, 2		D
(3) Temperature - or special handling conditions	1, 2		D
(4) Curing (drying time before next operation)	1, 2		D
(5) Workmanship	2		D, F, G
(e) Methods			
(1) Face grain orientation with respect to rafters	2		D, E_1

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___

STATION NAME: ROOF SHEATHING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
(2) Joints centered over rafters	2		D, E_1
(3) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: FINISH ROOFING STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. MATERIALS:			
(a) Underlayment			
(1) Type/Grade	1		A, B, D
(2) Weight, Thickness	1		B, D
(3) Condition	2		D, F, G
(b) Roofing			
(1) Type/Grade	1		A, B, D
(2) Weight	1		B, D
(3) Condition	2		D, F, G
(c) Weather Flashing			
(1) Material	1		B, D
(2) Type/Size/Weight	1		B, D, F$_1$
(3) Condition	2		D, F, G
(d) Nails			
(1) Size	1, 2		B, D, F$_1$
(2) Type/Grade	1, 2, 6		B, D
(3) Condition	2		D, F, G

IN-PLANT INSPECTION CHECKLIST (CONTINUED)

PAGE ___ OF ___ .

STATION NAME: FINISH ROOFING STATION STATION NO.:

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
2. INSTALLATION:			
(a) Underlayment	1, 2		D, G
(b) Flashing	1, 2		D, G
(c) Layout	1		D, F
(d) Nails			
(1) Number	1		D
(2) Location and Spacing	1		D, F_1
(3) Penetration	1, 2		D, F
(e) Exposure	1		D, F_1
(f) Workmanship	2		D, F, G

IN-PLANT INSPECTION CHECKLIST

PAGE__ OF __

MANUFACTURER: _____ APPLICATION NO: _____
INSPECTION AGENCY: _____ PLANT LOCATION: _____
STATION NAME: FINAL COMPLIANCE INSPECTION AND CERTIFICATION STATION STATE: _____
MODEL (S): _____ STATION NO.: _____
SYSTEM APPROVAL NO(S).: _____

ESSENTIAL CHARACTERISTICS OF INSPECTION	SOURCES OF DESIGN INTENT	ACTUAL DESIGN REQUIREMENT	DETERMINATION OF COMPLIANCE
1. COMPLIANCE REVIEW:	2		D, F, G
2. LABEL:			
(a) Contents	2		D
(b) Location	1, 2		D
(c) Attachment (method of fastening)	1, 2		D
3. LABEL CONTROL RECORD:	2		D
4. MANUFACTURER'S DATA PLATE:			
(a) Contents	2		D
(b) Location	1, 2		D
(c) Attachment (method of fastening)	1, 2		D

Notes to the Inspection Checklists
Sources of Design Intent - References

1. Approved Building System (i.e., drawings and specifications).

2. Manufacturer's Approved Compliance Assurance Manual.

3. Standard Grading Rules for Western Lumber (1970), Western Wood Products Association, Section 752.

4. One and Two Family Dwelling Code, 1971 Edition, Section R-602.6.

5. Plywood Product Standard Handbook (1970), American Plywood Association, Sections 3.9, 3.10, 3.11 and 3.12.

6. Federal Specification FF-N-105B (March 17, 1971).

7. One and Two Family Dwelling Code, 1971 Edition, Section R-214.

8. One and Two Family Dwelling Code, 1971 Edition, Section R-215.

9. Underwriters Laboratories Construction Materials List.

10. Underwriters Laboratories Appliance Utilization List.

11. National Electric Code (NEC) (1971), Section 230-24.

12. NEC, (1971), Section 230-51.

13. NEC, (1971), Section 250-72.

14. NEC, (1971), Section 230-71.

15. NEC, (1971), Section 384-13.

16. NEC, (1971), Section 300-8.

17. NEC, (1971), Section 336-5.
(Non-metallic sheathed cable), No. 348-12 (Electrical metallic tubing) or other sections as applicable for other types of circuits or conductors.

18. NEC, (1971), Section 336-10.

19. NEC, (1971), Section 348-9 for electrical metallic tubing and other sections as applicable.

20. NEC, (1971), Section 370-13.

21. NEC, (1971), Section 370-10.

22. NEC, (1971), Section 370-8.

23. NEC, (1971), Section 370-19.

Determination of Compliance

A - Listing Agency Label

B - Manufacturer's Label

C - Test Reports

D - Visual Inspection

E - Physical Measurement or Test (in accordance with the following technique, as appropriate)

E_1 - Measurement with pocket tape or scale.

E_2 - Measurement of lumber moisture content - Electrical resistance type moisture meter.

E_3 - Measurement of plywood moisture content - Oven, scales, thermometer, timepiece, core saw.

E_4 - Measurement with a wire gage.

E_5 - Measurement with a continuity tester.

E_6 - Measurement with a megometer or equivalent dielectric testing equipment.

F - Inspector Knowledge

G - Inspector Judgement

H - Sampling by Inspector

INSPECTION REPORT

The suggested Inspection Report form is for use by the Inspection Agency inspector to report in summary form the results of his audit inspections of a manufacturer. Copies of the Inspection Report should be made available to the manufacturer and, as appropriate, the Administrative Agency. All Noncompliance Tags (CES Document No. C-04) and Prohibited Sales Notices (CES Document No. C-05) issued should be summarized by unit serial number on the Inspection Report. The frequency of occurrence for each defect should be so indicated in the column marked "Frequency" for each individual entry. Each individual report should be signed at the bottom by both the Inspection Agency inspector and the manufacturer's compliance control representative.

[*Name and address of Inspection Agency*]

INSPECTION REPORT

NAME OF MANUFACTURER: _____

PLANT LOCATION: _____

DATE OF REPORT: _____ REPORT NO: _____

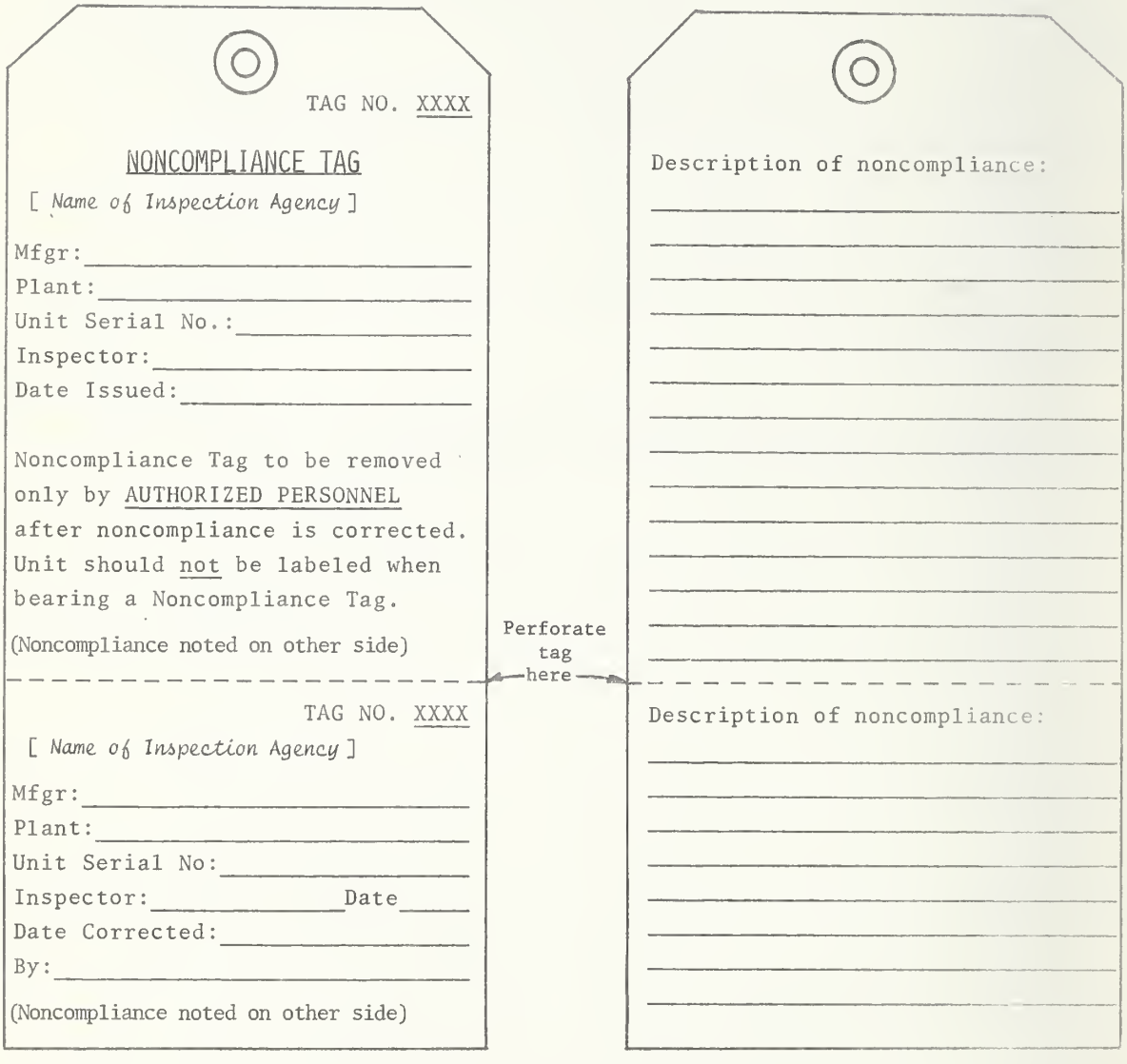
Unit Serial No.	Noncompliance Tag No.	Description of Defect	Frequency

Agency Inspector (Signature) _____ Mfgr. Inspector (Signature) _____ Page ____ of ____

NONCOMPLIANCE TAG

Deficiencies in construction found by the Inspection Agency inspector that can not be corrected immediately in his presence should be tagged with a Noncompliance Tag (red tag). It is suggested that the tag be pre-printed on both sides on heavy red paper stock material and be attached by a string in the area of the noncompliance; yet the tag should be prominently visible. The tags are individually serialized for reference and control purposes. The inspector fills out the tag noting the deficiency on both the portion of the tag attached to the unit and the detachable end which he keeps. A red tag may be attached to individual deficiencies or may apply to several deficiencies depending on the items involved and the judgement of the inspector. Only the Inspection Agency inspector or authorized manufacturer personnel should remove Noncompliance Tags. Completed tags should show the action taken to correct deficiencies and should be retained as part of the compliance assurance records. Units of construction should not be labeled when bearing a Noncompliance Tag. The status of Noncompliance Tags issued should be summarized on the Inspection Report, CES Document No. C-03.

The manufacturer may also utilize Noncompliance Tags or may use some other device, such as production travellers to identify construction deficiencies.



Front of Tag

Back of Tag

PROHIBITED SALES NOTICE

For the more serious unit violations which affect public health and safety and which can not be readily repaired as provided by a Noncompliance Tag, a Prohibited Sales Notice should be applied to the individual unit of production until such time as corrective measures have been implemented by the manufacturer. The Prohibited Sales Notice should be an official state notice with reference to appropriate laws and rules and regulations of the state and should be affixed when noncompliances would result in a hazard to health and safety and where major repair or rework is required by the manufacturer to bring the completed unit into code compliance. The notices should be on adhesive backed paper and should each be individually serialized and controlled by the Inspection Agency. Only Inspection Agency or Administrative Agency personnel should be authorized to remove a Prohibited Sales Notice.

Like the Noncompliance Tag, the Prohibited Sales Notice should be referenced on the Inspection Report, CES Document No. C-03.

PROHIBITED

SALE - INSTALLATION - OCCUPANCY

NOTICE IS HEREBY GIVEN THAT THE SALE, OFFERING FOR SALE, INSTALLATION OR OCCUPANCY OF THIS STRUCTURE IN [*Name of State*] IS PROHIBITED.

(Identify enabling legislation and regulations of state)

THE *(Name of Appropriate Agency)* SHALL BE NOTIFIED PRIOR TO MOVING THIS STRUCTURE OR UPON CORRECTION OF THE LISTED DEFICIENCIES

WARNING THE REMOVAL, DESTRUCTION OR CONCEALMENT OF THIS NOTICE BY ANY UNAUTHORIZED PERSON IS UNLAWFUL.

STATE OF _____

[*Name, address and telephone no. of appropriate agency*]

REFERENCE - IDENTIFY INSPECTION REPORT DESCRIBING DEFICIENCIES _____

DATE NOTICE POSTED _____ BY AGENCY INSPECTOR _____

MFGR. NAME _____ UNIT SERIAL NO. _____ SERIAL NO. OF THIS NOTICE _____

NOTIFICATION OF SUSPENDED ACTIVITIES

If a manufacturer is repeatedly conducting operations in direct violation with the Act or the Rules and Regulations, then an official Notification of Suspended Activities as suggested by this document should be issued. This document, which is a form letter, may be issued by the Administrative Agency, the Evaluation Agency or the Inspection Agency, in accordance with Part IV, Section 3(C) of the Model Rules and Regulations.

The suggested letter form requires the initiating agency to cite the applicable manufacturer violations and to direct the party at fault to surrender any certification labels in their possession to the issuing agency.

When the manufacturer has taken corrective action to remedy the condition which led to the suspension, the manufacturer should so notify the Administrative Agency in writing. At that time the conditions of the violation and the remedy proposed should be reassessed. If all conditions are satisfactory to the Administrative Agency, the suspension should be lifted and Inspection Agency monitoring reinstated at the 100% level.

The same type of form letter notification could be utilized to suspend or revoke the approval of Evaluation or Inspection Agencies as provided for by Part IV, Section 3 of the Model Rules and Regulations.

STATE OF _____

[*Name and address of Administrative Agency, Evaluation Agency, or Inspection Agency*]

Date: _____

TO: *(Name and Address of Manufacturer)*

SUBJECT: Notification of Suspended Activities

As prescribed in *(Part IV, Section 3(C), "Suspension and Revocation" - Certification)* of the Model Rules and Regulations for the Manufactured Building Act, any manufacturer who violates or fails to comply with the Act and the Rules and Regulations shall be notified in writing describing the reasons for suspension or revocation along with the specific violations and to instruct the manufacturer to deliver all labels in their possession, or under their control, to the issuing agency.

SPECIFIC VIOLATIONS: _____

INSTRUCTIONS FOR RETURNING LABELS TO ISSUING AGENCY: _____

I hereby certify that the violations noted on this form are true and correct.

_____
(Signature and Title)

cc: Appropriate Administrative, Evaluation, Inspection or Local Enforcement Agencies involved

Administrative Agency in states having granted reciprocity

LABEL

The suggested label shown on page 2 of this document contains the information and wording as required in Part IV, Section 3(B) of the Model Rules and Regulations. However, this wording does appear to imply a liability by the Inspection Agency which is not otherwise implied by the Rules and Regulations. Accordingly, it is recommended that the question of liability be investigated with regard to any particular state program before the wording of the label is adopted in that specific state.

The label should be made of a material which can be permanently imprinted or embossed with the necessary information and which cannot be removed after being attached to the unit of construction without being destroyed.

Labels should only be attached to manufactured buildings or building components which comply with all applicable codes, standards, and Rules and Regulations. Attachment of labels should be done by the Inspection Agency, or, if delegated in accordance with the Rules and Regulations, by the manufacturer's employees charged with controlling the use of labels. Records of label usage should be maintained as suggested in the Label Control Record (CES Document No. C-08). Reference is also made to CES Document S-09, pages 7 and 25 "Compliance Records" and "Final Inspection and Certification" in which record keeping and final inspections are discussed.

At the discretion of the Administrative Agency [Part IV, Section 3(B)(1)], labels may be limited in size and content for building components whose size or shape do not permit the full information to be placed thereon. In such cases, the alternate label must be approved by the Administrative Agency. For high production components, alternate labeling methods may be approved, such as simple markings or identifications stamped, etched, embossed, or otherwise permanently affixed to the component during, or as part of the fabrication process.

STATE OF _____
DEPARTMENT OF _____

This label certifies that this building [or building component] has been manufactured in accordance with an approved building system and compliance assurance program approved by _____ (Name of Evaluation Agency) and inspected by _____ (Name of Inspection Agency) under the auspices and approval of _____ (Name of State)

LABEL SERIAL NO: _____
MANUFACTURER'S SERIAL NO: _____
APPROVAL NUMBERS ☐ BUILDING SYSTEM: _____
☐ COMPLIANCE ASSURANCE PROGRAM: _____
SEE DATA PLATE LOCATED ON: _____
AGENCY ISSUING THIS LABEL: _____

LABEL CONTROL RECORD

This document suggests a means of formally controlling the usage of certification labels. Control over issuance of labels is required by Part IV, Section 3(B)(2) of the Model Rules and Regulations and permanent records of the handling of labels is required by Part IV, Section 3(B)(3).

The suggested form provides a record of label usage and direct traceability between the manufacturer's production unit serial number and the label serial number as well as the date the label was affixed (Date of Manufacture). Other information required is the destination of the individual unit, the building system approval number, and name of the labeling person.

As each page of the form is completed, it should be signed and dated by the respective manufacturer and Inspection Agency inspection personnel. The original copy of the form should be retained in the compliance assurance record of the Inspection Agency; duplicate copies should also be provided to the manufacturer and to the Administrative Agency for record keeping purposes.

Subject to approval by the Administrative Agency, for small high production manufactured building components which do not require to carry the full label with a label serial number, the Label Control Records may be based on lot or batch numbers.

[*Name and address of Inspection Agency*]

LABEL CONTROL RECORD

NAME OF MANUFACTURER: _____

PLANT LOCATION: _____

Manufacturer's Serial No.	Label Serial No.	Date of Mfg.	Destination	Building System Approval No.	Labeled by (Name)

Agency Inspector (Signature & Date) _____ Mfgr. Inspector (Signature & Date) _____ Page ____ of ____

STANDARD PERMIT APPLICATION FORM

The concept of a national uniform building permit application form was originally introduced by the Bureau of the Census, U. S. Department of Commerce, in 1966. The purpose was to provide a document which could be adopted by building permit offices for local use and at the same time contain basic information which would improve data reported to and collected by the Bureau of the Census in its monthly surveys. From the outset, the major building codes organizations have been kept informed of whatever progress has been made and have approved of the idea of a uniform form. Two of them recommended adoption of earlier versions of the form to their members.

The original document was modified by a number of users and the form presented is a "third generation" version. From what reactions thus far received, the contents, with local modifications, are satisfactory for many jurisdictions. However, the form and its contents should not be considered mandatory. The form is a viable document which should and must be modified to meet local requirements and changing data needs. It is not meant to be unchanging and sterile.

It would be self-defeating to recommend a single form for adoption by all jurisdictions - large and small, metropolitan and rural. As presented, the form and its contents should be considered as a core which can be accepted as is, which can be rearranged or which can be implemented as necessary. Some of the items - Type of Sewage Disposal, Type of Water Supply, Type of Roof - may not be applicable in many jurisdictions and there is nothing sacred about retaining them. However, a review will indicate that most of the data listed are basic information items.

If a single uniform application form is not applicable for an entire State, the proposed form can be modified for adoption within a metropolitan area in which most informational requirements among jurisdictions are similar. Adoption would enable a local organization - a State or local university, a regional planning commission, etc. - to keep track of new construction: where and what is going on.

Since the inception of the undertaking in 1966, the Bureau of the Census has volunteered its aid to any State or metropolitan area-wide agency in preparing a modified version of the form which meets its particular requirements. This offer still stands.

(*Name of Permit Issuing Jurisdiction*
Name of Department Issuing Building Permits)

BUILDING PERMIT APPLICATION

IMPORTANT – Complete ALL items. Mark boxes where applicable.

I. LOCATION OF BUILDING

Number and street | Subdivision | Lot | Block | Census tract

N S
E W side of _____; _____ feet E W from intersection of _____
N S
(Other local geographic, political, or legal subdivision identification)

II. TYPE AND COST OF BUILDING – *All oppliconts complete Ports A – D*

A. TYPE OF IMPROVEMENT

1 ☐ New building
2 ☐ Addition *(If residential, enter number of new housing units added, if any, in Part D, 13)*
3 ☐ Alteration *(See 2 above)*
4 ☐ Repair, replacement
5 ☐ Wrecking *(If multifamily residential, enter number of units in building in Part D, 13)*
6 ☐ Moving (relocation)
7 ☐ Foundation only

B. OWNERSHIP

8 ☐ Private (individual, corporation, nonprofit institution, etc.)
9 ☐ Public (Federal, State, or local government)

D. PROPOSED USE – *For "Wrecking" most recent use*

Residential

12 ☐ One family
13 ☐ Two or more family – *Enter number of units* ⟶ _____
14 ☐ Transient hotel, motel, or dormitory – *Enter number of units* ⟶ _____
15 ☐ Garage
16 ☐ Carport
17 ☐ Other – *Specify* _____

Nonresidential

18 ☐ Amusement, recreational
19 ☐ Church, other religious
20 ☐ Industrial
21 ☐ Parking garage
22 ☐ Service station, repair garage
23 ☐ Hospital, institutional
24 ☐ Office, bank, professional
25 ☐ Public utility
26 ☐ School, library, other educational
27 ☐ Stores, mercantile
28 ☐ Tanks, towers
29 ☐ Other – *Specify* _____

C. COST

	(Omit cents)
10. Cost of improvement	$
To be installed but not included in the above cost	
a. Electrical	
b. Plumbing	
c. Heating, air conditioning	
d. Other (elevator, etc.)	
11. TOTAL COST OF IMPROVEMENT	$

Nonresidential – Describe in detail proposed use of buildings, e.g., food processing plant, machine shop, laundry building at hospital, elementary school, secondary school, college, parochial school, parking garage for department store, rental office building, office building at industrial plant. If use of existing building is being changed, enter proposed use.

III. SELECTED CHARACTERISTICS OF BUILDING – *For new buildings and additions, complete Parts E – L; for wrecking, complete only Part J, for all others skip to IV.*

E. PRINCIPAL TYPE OF FRAME

30 ☐ Masonry (wall bearing)
31 ☐ Wood frame
32 ☐ Structural steel
33 ☐ Reinforced concrete
34 ☐ Other – *Specify* _____

F. PRINCIPAL TYPE OF HEATING FUEL

35 ☐ Gas
36 ☐ Oil
37 ☐ Electricity
38 ☐ Coal
39 ☐ Other – *Specify* _____

G. TYPE OF SEWAGE DISPOSAL

40 ☐ Public or private company
41 ☐ Individual (septic tank, etc.)

H. TYPE OF WATER SUPPLY

42 ☐ Public or private company
43 ☐ Individual (well, cistern)

I. TYPE OF MECHANICAL

Will there be central air conditioning?
44 ☐ Yes 45 ☐ No

Will there be an elevator?
46 ☐ Yes 47 ☐ No

J. DIMENSIONS

48. Number of stories . . . . . .
49. Total square feet of floor area, all floors, based on exterior dimensions . . . . . .
50. Total land area, sq. ft. . . . . .

K. NUMBER OF OFF-STREET PARKING SPACES

51. Enclosed . . . . . .
52. Outdoors . . . . . .

L. RESIDENTIAL BUILDINGS ONLY

53. Number of bedrooms . . . . . .
54. Number of bathrooms { Full . . . . . / Partial . . . .

IV. IDENTIFICATION – *To be completed by all applicants*

	Name	Mailing address – *Number, street, city, and State*	ZIP code	Tel. No.
1. Owner				
2. Contractor				
3. Architect				

The owner of this building and the undersigned agree to conform to all applicable laws of *(name of permit jurisdiction)*.

Signature of applicant	Address	Application date

DO NOT WRITE IN THIS SPACE – FOR OFFICE USE

Approved by	Permit fee	Date permit issued	Permit number
	$		

Recommended by: U.S. Department of Commerce Bureau of the Census July 1, 1968

STATE OF _____

[*Name and Address of Administrative Agency*]

MANUFACTURED BUILDING VIOLATION REPORT

GENERAL INFORMATION

Name of Local Enforcement Agency _____

Address _____

Name of Inspection Agency _____

Address _____

Name of Builder or Owner _____

Address _____

Location of Unit _____

UNIT IDENTIFICATION

Manufacturer _____

Model Designation and Serial No. _____

Unit Label No. _____

Building System Approval No. _____ C.A. Program Approval No. _____

Building Permit No. _____

VIOLATIONS:

_____

_____

_____

_____

_____ _____ _____

(Date of Inspection) (Name of Inspector) (Signature of Inspector)

ACTIONS TAKEN ☐ Occupancy Permit Withheld ☐ Provisional Occupancy Permit Issued

☐ Other _____

_____ _____ _____ _____

(Name of Local Building Official) (Title) (Signature) (Date)

ADMINISTRATIVE AGENCY USE ONLY

Report Received (Date) _____

Actions Taken _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

[*Name and Address of Local Enforcement Agency*]

CERTIFICATE OF OCCUPANCY

No. _____ Date _____

C.O. Appl. No._____ Building Permit No._____ Date issued _____

Location_____

Map No._____ Section_____ Block_____ Lot_____

Proposed Use_____

No. of Stories _____ No. of units_____

☐ This certifies that the building located at premises indicated above complies with all applicable local ordinances.

☐ This certificate is issued pursuant to the requirements of (*Identify enabling state legislation and regulations*) and complies with applicable local ordinances.
Approval Report No._____ Label No._____

This certificate issued to: Name: _____
(Owner, lessee or tenant) Address: _____

_____
(Seal or Stamp) (Signature of Local Enforcement Agency Official)

Any change in the type of occupancy, or part of premises thereof, will render this certificate VOID and a NEW certificate must be obtained.